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| **From Blueprint to Fingerprint: A First Grade Perspective on the Technological Classroom**  The charge: to create a blueprint for the model K-12 classroom five years from the present. Answering this charge with a single blueprint or suggestion is paramount to saying that one superior way exists to educate children. What’s needed to answer this call? Parameters.  Imagine a first grade classroom. Present now and even more prevalent five years from now are six and seven year old technology savvy children. These children bring with them a wealth of technological experience. They can program remotes, use cell phones, calibrate Wii games, play social networking games such as Webkins and Runescape, use digital cameras and video equipment, email, text and even Twitter. These children are intuitive as they maneuver their way around the computer, not afraid to push buttons, open programs, explore programs. Presently, these children enter a classroom and are asked to sit on the carpet and listen to a set of instructions or lesson on how to do something. No wonder they roll around. No wonder they talk to each other. No wonder they wander around the room. No wonder they’re bored.  The response: A classroom that integrates their physical world with technology. The first area to explore is collaborative environments. Everything about the way a first grader learns is collaborative. They talk, they share and they copy each other to learn. A classroom that capitalizes on the strength of collaboration offers videoconferencing capabilities for students to learn from first hand sources. When first graders are learning about penguins, the capability to talk to experts in the field exists. Platforms such as Thinkfinity allow students to collaborate to create websites that highlight their growing expertise in a subject area. The audience is real. The work is authentic. The products are shared with other classes within a school or in a broader educational arena. Other students learn from the modeling provided in the shared workplace for cooperation (Li, Lau, Shih, & Li, 2008).  Because first grade students are so young, parents and caregivers play an integral part in their learning and maintaining open and clear lines of online communication between the home and school environment is critical. At the very least, email is required as a simplistic communication tool for parents and teachers. Teacher webpages, Twitter capabilities, mass texting features, and podcasting can extend the learning into students’ living rooms. As stated in the Horizon Report K-12, the teachable moment occurs when the child is curious (Johnson, Levine, Smith, Smythe, 2009). This certainly doesn’t always happen in the confines of a school day. The use of online communication tools can help bridge the gap and provide access to learning any place and any time (Beldarrain, 2006). Students who want to revisit a video, a podcast, online documents, e-books, etc. can have the capability the moment they’re moved by curiosity. Online communication tools such as these can used to remediate as well as supplement instruction.  While most first graders don’t come to school equipped with mobile phones, oftentimes they do come to school with advanced technologies such as Nintendo DS systems. The possibilities for these platforms to provide educational supports is immense. While a market for educational versions of Nintendo games might not be pressing now, if education embraces the potential of these platforms, marketing and production of such applications will emerge and flourish. Mobile technology can also complement online communication where parents and caregivers are linked to Student Information Systems and receive mobile updates about attendance, grades, lunch account balances, upcoming assignments, exams and even field trips (Watson & Watson, 2007).  Cloud Computing exists currently in the educational arena as a way to store and share student work. Dedicated server space for schools within a district, for teachers within a school, and for students within individual classes exist. As data becomes more secure, this same technology will extend beyond the school walls. This server space will be available to students from anywhere outside the boundaries of the school.  Smart Objects hold a wealth of potential for first graders. They love to manipulate and touch things and much of their physical learning is tied closely to their cognitive learning. Kinesthetic opportunities away from a keyboard or computer screen holds a myriad of possibilities and promises to ensure that students stay physically active and healthy. The Wii gaming system is one way to integrate this into a classroom. The use of smart objects such as realia that links to the computer to provide additional information in the form of text support, video support and audio support is emerging. The area in most need of this support is in the curricular areas that are less concrete such as vocabulary development, social studies concepts and science concepts that can’t be demonstrated in a traditional classroom setting.  The Personal Web is already emerging as a way of technological life, even among first graders. Sites that allow students to create avatars such as <http://www.Carrotsticks.com> and create spaces and stickers and printables of their own such as <http://www.NationalCity.com/StudentSavers> are hot commodities. Personalizing teacher space through the use of Moodle or other various content management systems enable the classroom model to present itself online. While presently, this model of personal web is more of an administrative tool for teachers the paradigm shift to becoming a student-centered tool has already begun.  Many of the barriers to first graders jumping on the proverbial technological wagon that exist now such as reliance on keyboarding skills and reading capabilities are beginning to fade as video, audio support, and other creative input avenues emerge. While the quintessential classroom looks very different from first to fifth grade and sixth to twelfth grade, differentiating the desires and needs of students and implementing technology to best support their developmental needs is where the true expertise lies. |
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